

## AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A recording method for recording a real time file including real time data to a disk-shaped information recording medium so that the real time data can be continuously reproduced while the real time data is reproduced according to a ~~standard~~-reproduction model, wherein:

the ~~standard~~-reproduction model includes a pickup that reads the real time data from the disk-shaped information recording medium, a buffer memory that temporarily stores the real time data read by the pickup, and a decoding module that reads the real time data from the buffer memory and processes the read real time data, and

access performance of the standard reproduction model is provided by the following formula,

$$T_{acc} = A \cdot dN + Trev + B$$

where  $T_{acc}$  is an access time that is a time required for the pickup to move from one area to another area,  $dN$  is a difference in rotational speed of the disk-shaped information recording medium before and after the movement of the pickup,  $Trev$  is a rotation waiting time at a target access position,  $A$  and  $B$  are constants;

~~the said recording method comprises~~ comprising the steps of:

searching, from a plurality of logically continuous unused areas in the disk-shaped information recording medium, an area, as a data recording area, that satisfies a real time reproducing condition which is a reproducing condition to prevent underflow during data reproduction operation, the real time reproducing condition being determined based on the access performance of the ~~standard~~-reproduction model, and

recording the real time data to the searched data recording area.

2. (Currently Amended) A information recording apparatus for recording a real time file including real time data to a disk-shaped information recording medium so that the real time data can be continuously reproduced while the real time data is reproduced according to a ~~standard~~ reproduction model, wherein:

the ~~standard~~-reproduction model includes a pickup that reads the real time data from the disk-

shaped information recording medium, a buffer memory that temporarily stores the real time data read by the pickup, and a decoding module that reads the real time data from the buffer memory and processes the read real time data, and

access performance of the standard reproduction model is provided by the following formula,

$$T_{acc} = A \cdot dN + T_{rev} + B$$

where  $T_{acc}$  is an access time that is a time required for the pickup to move from one area to another area,  $dN$  is a difference in rotational speed of the disk-shaped information recording medium before and after the movement of the pickup,  $T_{rev}$  is a rotation waiting time at a target access position,  $A$  and  $B$  are constants;

~~the said apparatus comprises~~comprising:

a section operable to search, from a plurality of logically continuous unused areas in the disk-shaped information recording medium, an area, as a data recording area, that satisfies a real time reproducing condition which is a reproducing condition to prevent underflow during data reproduction operation, the real time reproducing condition being determined based on the access performance of the ~~standard~~ reproduction model, and

a section operable to record the real time data to the searched data recording area.

3-5. (Canceled).